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## How to Tackle Price Risk in the Grain Market

As one of the most significant global commodities, recent trend shifts have impacted the grain market. High volatility, exposure to country risk, and logistics are just a few of the significant issues that have impacted the market. Moving forward, we will explore in more depth the main trends and factors.



### Exposure to Country Risk

Global grain markets have been coping with extraordinary price volatility in the aftermath of Russia's military invasion of Ukraine, a circumstance that has revived the 2020-2021 grain price boom. The Black Sea area is a significant producer and exporter of wheat and a vital centre for agricultural commodities commerce on a worldwide scale. Russia and Ukraine together represent around 30% of global wheat exports and offer millions of tons of wheat to developing nations in the Middle East and North Africa

(MENA), South Asia, and Sub-Saharan Africa that rely on food imports. Given Ukraine's usual planting cycle, the conflict comes at a particularly perilous moment for agricultural output and food exports from the nation.

Reduced yields and increased prices will disproportionately negatively impact nations that rely heavily on Russian and Ukrainian wheat supplies. Among their greatest and most reliant purchasers are emerging and frontier markets in Africa, the Middle East, and Asia, where political institutions are strained by pandemics, rising

energy costs, and war. Consumers have significantly less discretionary spending to compensate for food inflation. Historically, rising food costs have been fuelling social and political upheaval in these places. With global wheat supplies well below normal and prices at unsustainable levels, the potential of hunger, unrest, and broader war is growing quickly.

Regardless of when the conflict ends, its influence on global grain trading will echo for some time as markets constantly analyse actual and perceived grain supply shortfalls and rebalance risk premiums.

Nonetheless, there are also other countries that were hindered by other developments. As the South American country prepares for autumn, Argentina's corn and soybean harvests have been devastated by frost. This winter, drought, supply chain challenges, and high commodity prices have afflicted the nation, exacerbating already-scarce global food and feed supplies and global food security concerns.

Any losses in soybean or corn output are important, since Argentina is the world's third-biggest exporter of grain and soybeans. Additionally, it is the top exporter of soybean products in the world. The early cold blasts raise the possibility of severe harm to agricultural harvests, which has ravaged chronic drought conditions in Argentina.

The Buenos Aires Grains Exchange reduced its soybean harvest estimate for the 2021/22 season by 73 million bushels to 1.54 billion bushels. As of early March, the USDA prediction for Argentina soybeans was 1.60 billion bushels. Additionally, the Exchange reduced its forecast of corn output by 276 million bushels, bringing it to 1.93 billion bushels. Earlier in March, the USDA forecasted Argentina's soybean output for 2021/22 at 2.09 billion bushels.

There is a lag between agricultural production collapse and retail food shortages (grocery stores). We are now consuming the winter wheat crop in March. By late summer, we will be reliant on wheat produced by spring wheat plantings worldwide, and such crops are simply not being planted at the rate required to feed the globe.

**Price Volatility**

Increased price volatility offers a separate concern, increasing market uncertainty, affecting production choices, and perhaps encouraging speculative activity. Both would lead to further inflating food prices.

Prior to the conflict, food costs were already high. Due to poor harvests in South America, increased global demand, and supply chain challenges associated with the pandemic, grain, and oilseed stockpiles were depleted, driving prices to their highest levels since 2011–2013. Prices of critical energy-intensive inputs such as fertilizer have been and continue to be near-record highs.

Conflict in the Black Sea area has interrupted grain exports from the region and created significant uncertainty in global grain trading. Since February 24, Ukraine has banned commercial port operations. Very high shipping insurance prices also harm Russian grain transportation over the Black Sea. Additionally, business transactions are complicated by the penalties that have been imposed. As a result, grain prices for all major exporters have increased significantly.



As a consequence of Russia's recent decision to suspend exports of key commodities such as wheat, barley, and maize until the end of June, grain prices spiked across the board in March. Corn, wheat, soybean, and raw sugar prices have increased by 21.6%, 45.6%, 22%, and 0.4%, respectively, year to date.

### Challenging Logistics

In recent months, grain dealers have been vocal regarding rail performance and its effect on export prices. Since December 2021, a lull in rail logistics has bolstered wheat exports. Fortunately, traders report that these challenges have eased in January, although train service for the transaction remains much less than it was a year ago.

According to the Association of American Railroads, weekly train traffic in the United States was down 7% in the week ending January 15 compared to the same week last year. The same week, total grain exports, including wheat, fell 11%. According to the USDA's weekly Transportation Report, bids for shuttle service in the secondary railcar market have remained strong, but much lower than they were in early January.

In addition to these issues, rising fuel prices greatly increase the cost of transporting grains to grain storage and milling suppliers. Thus, growing fuel prices affect farmers on two fronts: first, the cost of operating their equipment, and second, the cost of transportation.

### Stringent Safety Standards and Regulation

Numerous nations have implemented various food safety management systems and regulatory frameworks. The disparity in these established laws may result in international conflict, impeding market expansion. This tendency is more pronounced in nations that have developed scientific risk-based frameworks for regulating national food safety standards. Additionally, the ability to design and execute new legislation and infrastructure to manage food safety concerns is contingent on the country's economic position, varying with each country.

Exports of grains, pulses, and oilseeds must adhere to stringent food safety measures, including HACCP, limiting pollutants and pesticide residues to permissible levels, and adhering to special regulations, such as those governing new foods sprouted grains and pulses. European buyers are risk-averse and often need further certification and confirmation of good behaviour.

Grain quality is crucial throughout the value chain, from production through storage, processing, and finally, giving a high-quality product to customers. Nutrient additions to the soil, precise crop growth sites, how and when crops were transported, the destination of the crops, and all storage conditions, as well as critical laboratory test findings, are critical. Naturally, if industry or government regulatory agencies want information on your grain, they will require all of this information. This requires total openness and precise record-keeping throughout the manufacturing process.

### Paucity of Fertilizers

Western sanctions are severely disrupting fertilizer shipments from Russia and Belarus, which are exacerbating the problem. Russia is the world's biggest fertilizer producer, and the two nations together account for almost 40% of worldwide potash exports. Fertilizer costs have risen dramatically in response, reducing worldwide availability and usage and jeopardizing agricultural output.



Elsewhere, especially in Europe, fertilizer companies have been forced to restrict or suspend output owing to high energy costs, resulting in a near doubling of prices in certain situations. Growers are reacting by reducing fertilizer use, moving crops, and reducing acreage, all of which will have an effect on agricultural output in the

next year and probably beyond, depending on the war's course and residual sanctions effects.

### Persistence of Drought

Wheat market volatility is also influenced by commercial futures trading. Managed money seeks immediate gains, putting the markets under pressure. However, speculators tend to be positive on wheat, owing to persistent weather issues for both old and new wheat harvests in the Northern Hemisphere.



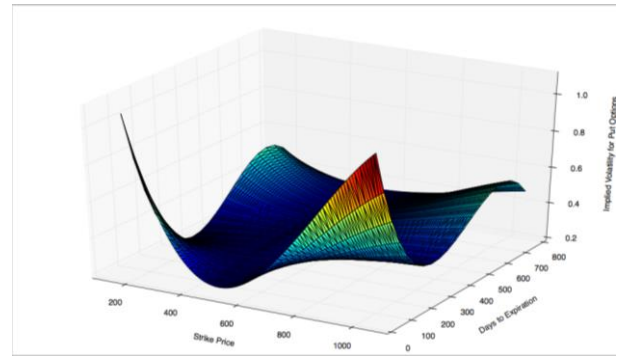
And yet, a prediction for rain and snow in certain locations this week triggered the precipitous decline in HRW futures prices. While it is too early to predict what the remainder of 2022 will bring, moisture is necessary to establish a new crop of winter wheat. As a result, wheat importers can anticipate the market to remain volatile in response to weather reports.

### Grain Futures vs. Grain Options

Considering these ongoing challenges, futures and options contracts are critical components of risk management in the grain market. Even though each is formally categorized as a derivatives product, their capabilities are rather distinct.

Purchasing futures contracts in the corn or wheat markets is a normal element of conducting business for many farmers. Long futures positions safeguard crops against calamity and are typically utilized to avoid the danger of spot market prices lagging during harvest. However, such solutions may be costly and are not always effective. When it comes to mitigating the risks associated with the

unexpected, a straddle strategy is frequently preferred.



Here are a few major features that distinguish grain futures and grain options from other financial instruments:

**Commitment:** The degree of commitment is one of the fundamental distinctions between futures and options. A futures contract binds players to the specified conditions of settlement, while an option grants the holder the right but not the duty to purchase or sell at a future date. This is critical because financially resolved options contracts help individuals maintain their liquidity.

**Calculation:** Although grain futures and options are priced using the same pricing technique as the underlying commodity, their profit and loss statements are calculated substantially differently. Profits and losses in the corn and wheat markets are calculated on a tick-by-tick basis. This is also true for options classified as "in-the-money" or "out-of-the-money" contracts. However, the effect on profit and loss is somewhat different due to the way the whole options chain is priced with respect to the contract's strike price.

**Risk:** In the absence of risk management limits, trading futures contracts directly exposes the trader to potentially infinite financial responsibility. In contrast, options provide a completely calculated risk, with the only money at risk being the premium paid for the contract.

**Flexibility:** Possibly the most significant distinction between futures and options is the degree of flexibility. While it is true that futures provide an infinite number of trading opportunities, options may be employed in a wider sense. With their low

upfront costs and cash settlement, grain options provide hedgers and speculators unique possibilities not available in grain futures, one of which is the straddle technique.

### Bottom Line

Overall, the grain market has been subjected to a plethora of disruptions in the past few months. The Russian-Ukrainian conflict represents one of the most paramount events, that had ripple effects on supply, logistics, and price volatility. More stringent regulation and the persistence of drought are other important elements that impacted the grain market. Hence, grain options and futures represent some instruments that could be leveraged to tackle the ongoing shifts in the grain market dynamics.

### About ComFin Software

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With the CTRM solution **Comcore™** you will have the perfect tools to maximise your profits by minimising your financial risks.

Instead of having to deal with paperwork, or maintaining, updating, and reviewing multiple spreadsheets, the Comcore™ system helps you streamline everything from trading futures and options to their underlying commodities (i.e., paper and physical markets).

The complete Comcore™ software is available in 108 languages.

Furthermore, ComFin Software is recognised for its ability to provide consulting services in all aspects of soft commodities trading.

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